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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Karen Elbing on May 30, 2008.

- 1. Rewrite claims 1, 4, 25, 28, 32, 36 and 37:
 - 1. A bovine whose genome comprises a non-naturally occurring mutation in one or both alleles of an endogenous prion nucleic acid, wherein said mutation comprises a transcriptional termination sequence, and wherein said bovine exhibits reduced functional prion production.
 - 4. The bovine of claim 1, wherein said mutation is heterozygous.
 - 25. An isolated bovine cell comprising a non-naturally occurring mutation in one or both alleles of an endogenous prion nucleic acid, wherein said mutation comprises a transcriptional termination sequence, and wherein said bovine cell exhibits reduced functional prion production.
 - 28. The cell of claim 25, wherein said mutation is heterozygous.
 - 32. A method for producing an isolated transgenic bovine cell having reduced expression of functional prion protein, comprising
 - (a) introducing a first prion gene targeting vector into a bovine fibroblast cell under conditions that allow homologous recombination between said first vector and a first allele of an endogenous prion nucleic acid in said cell, thereby introducing a heterozygous mutation in said cell, wherein said mutation comprises a transcriptional termination sequence and a selectable marker;

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(b) isolating said fibroblast cell containing the heterozygous mutation; and
(c) introducing a second prion gene targeting vector having a different
selectable marker than said first vector into said bovine cell of step (b) under
conditions that allow homologous recombination between said second vector
and a second allele of an endogenous prion nucleic acid in said cell, thereby
introducing a homologous mutation in said bovine cell.

- 36. The method of claim 32, wherein said bovine fibroblast cell is a bovine fetal fibroblast cell.
- 37. A method for producing a transgenic bovine having reduced expression of functional prion protein, said method comprising the steps of:
 - (a) inserting a diploid permeabilized cell into an enucleated metaphase II oocyte, wherein said cell comprises a first non-naturally occurring mutation in an endogenous prion nucleic acid wherein said mutation comprises a transcriptional termination sequence; and
 - (b) transferring said oocyte or an embryo formed from said oocyte into the uterus of a host bovine under conditions that allow said oocyte or said embryo to develop into a fetus, wherein the genome of said fetus comprises said non-naturally occurring mutation in said endogenous prion nucleic acid and wherein said fetus exhibits reduced functional prion production.

2. Cancel claims 7, 9-24 and 35

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Crouch, Ph.D. whose telephone number is 571-272-0727. The examiner can normally be reached on M-Fri, 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras can be reached on 571-272-4517. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah Crouch, Ph.D./ Primary Examiner, Art Unit 1632

June 9, 2008